REMARKS

This amendment responds to the Office Action which was mailed on January 18, 2006. In the claims, Claims 1-22 have been canceled and new Claims 43-71 substituted therefor. Claims 23-42 were previously canceled in response to a restriction requirement. It is respectfully submitted that Claims 43-71 are in condition for allowance. Request a favorable reconsideration of this application in light of the amendment and the remarks set forth below which constitute a full and complete response to the Office Action.

Claims 1-22 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Policastro et al. (April 1999) in view of Dower et al. (January 2000). More particularly, with respect to Claim 1 it has been asserted that Policastro teaches the concept of first responders using chemical/biological software operating on a portable computer for acquiring observed signs and symptoms data from a user interface, while Dower was relied on as teaching the concept of a first responder database containing known hazardous agents associated with related symptoms for performing agent identification by comparing signs and symptoms. Claim 1 has now been canceled and new Claim 43 substituted therefor. It is respectfully submitted that Claim 43 is patentable over the prior art cited and therefore the rejection should be withdrawn.

First of all, it is respectfully submitted that although Policastro teaches a *concept* of first responders using chem/bio software on a portable computer, it does not actually teach the elements or steps of applicant's invention. Furthermore, Policastro provides no description of the processes and rigor necessary to create an effective incident response tool. In fact, there is no indication of any reduction to practice of a workable system or method, but rather a proposed concept is provided with the suggestion that support tools

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"can be developed" to help decision-makers follow response procedures based on the best available understanding of the situation (see page 8, Decision Support Systems paragraph).

It is respectfully submitted that Policastro does not teach or suggest the elements or steps recited in the Claim 43. More specifically, Claim 43 includes the step of "acquiring observed signs and symptoms data from a user interface, wherein said data is input by a user to describe a given situation or condition which may or may not be associated with a hazardous incident." In contrast to applicant's claimed invention, Policastro describes a concept wherein an array of sensors are placed in key locations in a subway system to detect airborne hazard concentrations above a particular threshold concentration. The sensor data is then sent to a central command post for analysis, and can automatically drive predetermined mitigation procedures for the subway system such as barriers and curtains. However, although Policastro teaches the centralized use of sensor data, it provides no indication or analysis of the nature of the hazard, and more importantly, it does not permit the human input of data such as observed signs and symptoms by the user in order to make an identification and assessment of the hazard.

In contrast, applicant's invention sets the stage for an initial agent identification using a very discrete combination of "observed signs" such as color of smoke, vapor, clouds or liquids, odor, and other non-human presented observations; and observed human physiological "symptoms" such as nausea, tunnel vision, chest pain and others. No human observations are being tracked by Policastro, in fact, just the opposite is occurring. Policastro's signs are simply alarm data coming from an array of instrumental chemical sensors, with no human involvement except on the receiving end at the

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command center. In fact, the only detail provided by Policastro is an example that actually teaches away from the present invention. His example relies exclusively on sensor data, with no anticipation of a situational definition interface for input of human observation data as taught in the present invention. The static mapping of sensor input to a recommended ventilation response as taught by Policastro is in sharp contrast to the system illustrated in Figure 1 of the present invention, which includes situation definition interface 110, clock 130, time-dependent hazard assessment component 140, and a decision aid component 150.

In addition, although Dower teaches a physiological effects database for chemical-biological agent hazards, it does not teach the process or integrated methods by which one can generate computer algorithms and code to realize a useful, functional decision support system to drive incident response functions and procedures.

Therefore, applicant's invention as recited in Claim 43 is not taught or suggested by the combined teachings of Policastro and Dower because Claim 43 includes as a limitation the step of "acquiring observed signs and symptoms data from a user interface, wherein said data is input by a user to describe a given situation or condition which may or may not be associated with a hazardous incident," which is not described or suggested in the prior art cited. In addition, Claims 44-54 are either directly or indirectly dependent from Claim 43 and are further limiting thereto, therefore, these claims should also be considered in condition for allowance.

Based on the foregoing arguments, Claim 55 should also be considered in condition for allowance. Claim 55 includes the limitation "acquiring a situation definition from a user interface, wherein said interface permits user input of data to

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describe a given situation or condition which may or may not be associated with a hazardous incident," which, as discussed in the foregoing, is not taught or suggested by the prior art cited.

Moreover, Claim 55 includes the limitations "acquiring time data from a clock; and performing a time-dependent hazard assessment in response to the situation definition and time data, wherein the time-dependent hazard assessment is updated with elapsed time." The only time element mentioned by Policastro is response time. The present invention teaches the importance of multiple time-tracking functions as illustrated from the following excerpt: "Clock 130 is linked to all processes within system 100 that are time-dependent, or that require time tracking of some sort. Incident tracking may, for example, utilize the estimated time the incident occurred and the elapsed time since occurrence. Time tracking may also be embedded into the physical protection function described in detail below. This allows emergency responders to coordinate proactive personnel accountability processes that track entry and exit times and hazard doses received while within hot and warm zones. The physical protection function may also monitor over time what activities the responders are performing and track their exposure doses based on the particular protective ensemble that is worn."

The difference between Policastro's teaching and that of the present invention is further illustrated in the time element embedded into the decision aid interface of the present invention, "Decision aid interface 150 presents results from hazard assessment 140 along with memory aids such as check lists, queries and prompts to the user, and receives additional input from the user in the form of decision choices reflecting actual actions taken or hypothetical actions to be analyzed. Decision aid 150 is also time

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dependent. By way of example, as time passes, even in the absence of any action by incident responders, hazard assessment 140 will change based upon the time dependency of actual phenomenon such as weather, physical transport and hazard exposure, thus changing the possible choices and outcomes presented by decision aid 150. The user is prompted of the time dependent nature of the situation and the possible ramifications of delayed action."

The sole objective as taught in the example given by Policastro is to improve or shorten response time. The response time is improved according to Policastro by presenting a pre-calculated ventilation control strategy based upon the sensor data. No attempt is made to even assess the general nature of the hazard, let alone to perform agent identification as taught by the present invention. As noted ... "Hazard assessment 140 uses data obtain via situation definition interface 110 along with other data and processes, such as input from clock 130, to determine a hazard assessment as a function of time." These features of the invention are captured and recited in Claim 55 as described above. Therefore, it is respectfully submitted that Claim 55 should be considered in condition for allowance and that dependent claims 56-63 should also be allowable as further limiting thereto.
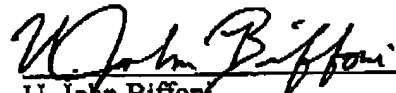
Finally, independent Claim 64 should also be considered in condition for allowance based on the foregoing analysis and the fact that Claim 64 recites the limitations, "a user interface component operative to receive a situation definition; a clock; and a time-dependent hazard assessment component responsive to the situation definition and clock." Here again, based on the foregoing there is no teaching, suggestion, or motivation for the claimed invention provide by the prior art cited. Of

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course, dependent Claims 65-71 are further limiting thereto and should also be considered in condition for allowance.

In summary, by this amendment Claims 1-22 have been canceled and new Claims 43-71 substituted therefor. Claims 43-71 remain in the case and based on the foregoing should be considered in condition for allowance. Accordingly, it is respectfully submitted that Claims 43-71 are patentable and in condition for allowance. Early reconsideration and withdrawal of the rejections is earnestly solicited, as is allowance of the claimed subject matter.

Respectfully submitted,

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DATE

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